

LISTING OF THE CLAIMS

The following listing, if entered, replaces all prior versions of the claims in the present application.

1. (Previously Presented) A method comprising:
identifying, based upon an intent associated with a logical volume, a first set of physical storage devices to reserve as backup for a second set of physical storage devices configured to provide the logical volume, wherein the second set of physical storage devices is configured using the intent associated with the logical volume, wherein the intent is obtained from a creator of the logical volume when the logical volume is being created and stored on the second set of physical storage devices, and wherein the intent comprises information identifying a set of characteristics specified by the creator of the logical volume, and
each physical storage device of the first set of physical storage devices and the second set of physical storage devices conforms to the intent.
2. (Original) The method of claim 1 further comprising:
reserving the first set of physical storage devices.
3. (Original) The method of claim 2 wherein
the reserving the first set of physical storage devices occurs at a time that the second set of physical storage devices is configured to provide the logical volume.
4. (Original) The method of claim 2 further comprising:
selecting a backup physical storage device of the first set of physical storage devices to replace a failed physical storage device of the second set of physical storage devices.

5. (Original) The method of claim 4 wherein the backup physical storage device conforms to the intent such that the selecting the backup physical storage device is performed without searching for the backup physical storage device.
6. (Original) The method of claim 2 further comprising: using a backup physical storage device of the first set of physical storage devices to increase a size of the logical volume.
7. (Original) The method of claim 1 wherein the intent comprises a rule used to configure the second set of physical storage devices for the logical volume.
8. (Original) The method of claim 1 wherein the rule is stored with the logical volume when the logical volume is configured.
9. (Original) The method of claim 1 wherein the rule corresponds to a command used to configure the logical volume.
10. (Original) The method of claim 1 wherein the rule is used to identify the available physical storage devices to configure the logical volume.
11. (Original) The method of claim 1 wherein the rule is used to identify available physical storage devices from which the first set of physical storage devices is identified.
12. (Original) The method of claim 1 wherein the intent is stored with the logical volume when the logical volume is configured.
13. (Original) The method of claim 1 wherein the logical volume is created when the logical volume is configured.

14. (Original) The method of claim 1 further comprising:
providing availability of the logical volume by ensuring that the first set of
physical storage devices is available and conforms to the intent of the
logical volume.
15. (Original) The method of claim 14 wherein
the availability of the logical volume meets an availability requirement.
16. (Previously Presented) A system comprising:
identifying means for identifying, based upon an intent associated with a logical
volume, a first set of physical storage devices to reserve as backup for a
second set of physical storage devices configured to provide the logical
volume, wherein
the second set of physical storage devices is configured using the intent
associated with the logical volume, wherein the intent is obtained
from a creator of the logical volume when the logical volume is
being created and stored on the second set of physical storage
devices, and wherein the intent comprises information identifying
a set of characteristics specified by the creator of the logical
volume, and
each physical storage device of the first set of physical storage devices and
the second set of physical storage devices conforms to the intent;
and
reserving means for reserving the first set of physical storage devices.
17. (Canceled)
18. (Previously Presented) The system of claim 16 wherein
the reserving the first set of physical storage devices occurs at a time that the
second set of physical storage devices is configured to provide the logical
volume.

19. (Previously Presented) The system of claim 16 further comprising:
selecting means for selecting a backup physical storage device of the first set of
physical storage devices to replace a failed physical storage device of the
second set of physical storage devices.
20. (Previously Presented) A computer-readable medium comprising:
identifying instructions configured to identify, based upon an intent associated
with a logical volume, a first set of physical storage devices to reserve as
backup for a second set of physical storage devices configured to provide
the logical volume, wherein
the second set of physical storage devices is configured using the intent
associated with the logical volume, wherein the intent is obtained
from a creator of the logical volume when the logical volume is
being created and stored on the second set of physical storage
devices, and wherein the intent comprises information identifying
a set of characteristics specified by the creator of the logical
volume, and
each physical storage device of the first set of physical storage devices and
the second set of physical storage devices conforms to the intent.
21. (Original) The computer-readable medium of claim 20 further comprising:
reserving instructions configured to reserve the first set of physical storage
devices.
22. (Original) The computer-readable medium of claim 21 wherein
the reserving the first set of physical storage devices occurs at a time that the
second set of physical storage devices is configured to provide the logical
volume.
23. (Original) The computer-readable medium of claim 21 further comprising:
selecting instructions configured to select a backup physical storage device of the
first set of physical storage devices to replace a failed physical storage
device of the second set of physical storage devices.

24. (Previously Presented) A system comprising:
an identifying module configured to identify, based upon an intent associated with
a logical volume, a first set of physical storage devices to reserve as
backup for a second set of physical storage devices configured to provide
the logical volume, wherein
the second set of physical storage devices is configured using the intent
associated with the logical volume, wherein the intent is obtained
from a creator of the logical volume when the logical volume is
being created and stored on the second set of physical storage
devices, and wherein the intent comprises information identifying
a set of characteristics specified by the creator of the logical
volume, and
each physical storage device of the first set of physical storage devices and
the second set of physical storage devices conforms to the intent.
25. (Original) The system of claim 24 further comprising:
a reserving module configured to reserve the first set of physical storage devices.
26. (Original) The system of claim 25 wherein
the reserving module reserves the first set of physical storage devices at a time
that the second set of physical storage devices is configured to provide the
logical volume.
27. (Original) The system of claim 25 further comprising:
a selecting module configured to select a backup physical storage device of the
first set of physical storage devices to replace a failed physical storage
device of the second set of physical storage devices.